



Feltham Properties Limited

Land at 25 Orchard Way, Harwell

Transport Statement

08 February 2021



modetransport.co.uk





transport planning

Feltham Properties Limited

Land at 25 Orchard Way, Harwell

Transport Statement

OFFICE ADDRESS:

9 Greyfriars Road,
Reading, RG1 1NU

PROJECT NO:

325533

DATE:

08 February 2021

REPORT No:

V1.0

PREPARED:

RJM

DATE OF ISSUE:

08 February 2021

STATUS:

Final

AUTHORISED

LF

CHECKED:

LF

CHANGE LOG

FILE NAME

210208 J325533
Transport Statement
v1.0.docx

DATE:

08 February 2021

CHECKED BY:

LF

REASON FOR CHANGE:

First Issue

210216 J325533

16 February 2021

LF

Second Issue

Transport Statement
v1.1.docx

CONTENTS

1.	Introduction	1
1.1	Overview	1
1.2	Document Purpose	1
1.3	Structure of the Report	1
2.	Existing Context	3
2.1	Overview	3
2.2	Location	3
2.3	Accessibility on Foot	4
2.4	Accessibility by Bicycle	5
2.5	Accessibility by Bus	5
2.6	Accessibility by Rail	6
2.7	Local Facilities and Amenities	6
2.8	Vehicle Access	8
2.9	Summary	8
3.	Development Proposals	9
3.1	Overview	9
3.2	Proposed Access Arrangements	9
3.3	Car and Cycle Parking Provision	10
3.4	Servicing, Refuse Collection and Emergency Access	10
4.	Trip Generation	11
4.1	Overview	11
4.2	Vehicular Trip Generation	11
4.3	Summary	13
5.	Conclusions and Recommendation	14
5.1	Conclusions	14
5.2	Recommendation	14

APPENDICES

APPENDIX A Illustrative Site Layout

APPENDIX B Swept Path Analysis

APPENDIX C TRICS Output

© Copyright mode transport planning. All rights reserved

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing with mode transport planning, no other party may copy, reproduce, distribute, make use of, or rely on the contents of the report. No liability is accepted by mode transport planning for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in this report are on the basis of mode transport planning using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and is expressly stated that no independent verification of any of the documents or information supplied to mode transport planning has been made.

1. Introduction

1.1 Overview

- 1.1.1 This Transport Statement (TS) has been prepared by mode transport planning (mode) on behalf of Feltham Properties Limited. It accompanies an Outline planning application (with all matters reserved except for access) for a residential development of 5 dwellings on Land at 25 Orchard Way, Harwell, Oxfordshire.
- 1.1.2 The site lies within the administrative area of the Vale of White Horse District Council (VoWH) who act as the local planning authority. Oxfordshire County Council (OCC) act as the Local Highway Authority and cover sites within the VoWH.
- 1.1.3 A planning application for the site was made in 2019 (application reference P/19/V1011/O) for 7 dwellings on the site but was withdrawn to allow for further consideration of comments received on the application. The 7 dwelling scheme was considered acceptable to the OCC Highway Officer reviewing the application. On this basis, the access arrangement agreed for the 7 dwelling scheme is retained for the proposed development.

1.2 Document Purpose

- 1.2.1 This TS has been prepared to consider the development proposals in transport terms aside relevant national and local planning policy and guidance, principally the National Planning Policy Framework (NPPF).
- 1.2.2 This TS has been prepared to evaluate existing conditions of the site in relation to the local road network and sustainable travel infrastructure, and how the proposed development is anticipated to affect these. This TS has been prepared with the following objectives:
- To present and review the existing sustainable travel credentials of the site and the surrounding area. In doing so, confirming the opportunity for future residents to utilise sustainable modes of travel.
 - To review the illustrative layout in terms of development schedule, access both for vehicles and pedestrians/cyclists, potential cycle and car parking provision and servicing of the illustrative layout.
 - To provide an estimation of development related trip generation using the TRICS database, in order to provide a view of forecast trips on the local highway network.

1.3 Structure of the Report

- 1.3.1 The remainder of this TS is structured as follows:

Section 2 – Existing Context

- This section describes the location of the site in relation to the wider area, noting its sustainable travel connections and key local transport networks, identifying existing amenities that are accessible as a result.

Section 3 – Development Proposals

- This section details the development schedule, proposed car and cycle parking provision, proposed access arrangements for all travel modes, as well as refuse collection arrangements.

Section 4 – Trip Generation

- This section provides an estimation of the number of trips generated by the development during the AM (08:00-09:00) and PM (17:00-18:00) network peak hours.

Section 5 – Conclusions and Recommendation

- This section collates the findings of this TS into conclusions in order to deliver upon the planning policy requirement. A recommendation is put forward on this basis.

2. Existing Context

2.1 Overview

2.1.1 This section details the application site in the context of its location, surrounding facilities / amenities, sustainable transport connections, as well as detailing accessibility by all modes of travel.

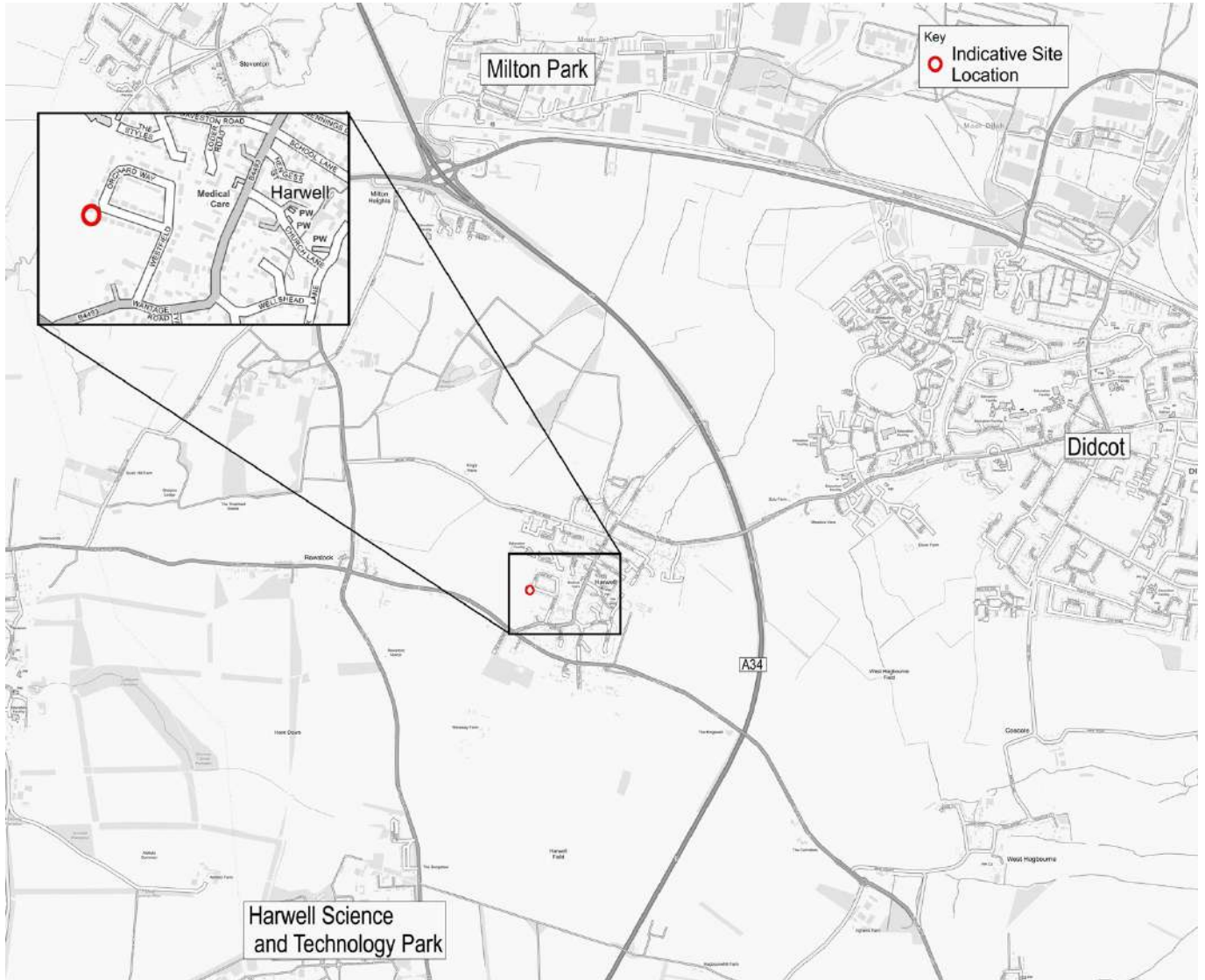
2.2 Location

2.2.1 The application site is located on the western edge of the village of Harwell. The application site is occupied by a single dwelling, number 25 Orchard Way and a large area of garden extends westwards beyond the dwelling. The surrounding area is principally residential with some education and community land uses. To the south of the application site is Harwell Recreation Ground and the A417 Reading Road.

2.2.2 To the west of the application site is open agricultural land. To the south, beyond Harwell Recreation Ground and the A417, is further residential development, as well as the Harwell Science and Technology Park, which is a significant regional employer. Didcot and in particular Milton Park to the east and north, are also significant regional employers and Didcot railway station provides regular train connections to major rail destinations (detailed further in [Section 2.7](#)).

2.2.3 The application site location in context of the above and surrounding highway network is demonstrated on [Figure 2.1](#).

Figure 2.1 Site Location



2.3 Accessibility on Foot

2.3.1 The application site is considered to be in an accessible location for pedestrians. Paved and lit footway provision is provided from the site to the surrounding area. Orchard Way for instance has footway (approximately 1.8m wide) on both sides of the carriageway. Westfield, Wantage Road and High Street are all linked to Orchard Way by footway.

2.3.2 A Public Right of Way (PRoW) (243/20/10) provides a direct link between Westfield and High Street. The link is paved, approximately 113m in length and runs along the northern boundary of the Harwell Village Hall. Harwell Community Primary School to the north of the application site is accessible from Orchard Way, via a pedestrian link.

2.4 Accessibility by Bicycle

- 2.4.1 The streets surrounding the application site are residential in nature and considered conducive to on-street cycling. The low speed and lightly trafficked environment provide opportunity for journeys by bicycle.
- 2.4.2 In the wider area, it is considered that there are good quality connections to National Cycle Route (NCR) 544 and the Harwell Science and Technology Park to the south. The street named Winaway provides an off-road link between Harwell and destinations to the south. Winaway is classed as a PRoW (243/17/10) and links with the shared foot/cycleway along the A4185 and the NCR 544. A signal crossing point is provided on the A4185 where the NCN crosses the carriageway.
- 2.4.3 To the east of Harwell, the B4493 provides a direct connection to Didcot. Sections of the route have recently been improved a result of the Great Western Park development and the Harwell Link Road. Improvements include new shared foot/cycleways and crossing points (both controlled and uncontrolled) along the route.

2.5 Accessibility by Bus

- 2.5.1 The nearest bus stops to the application site are located to the south on Wantage Road. The stops are approximately 370m walking distance from the application site and accessible by an existing footway. A bus stop flagpole is provided on both sides of the carriageway and the westbound bus stop also has a shelter. There are also bus stops on High Street to the northeast of the site approximately a 570m walking distance from the application site.
- 2.5.2 Both stops are served by the same bus routes including frequent serves between Oxford, Didcot, Milton Park, Wantage and the Harwell Science and Technology Campus to the south. The services are operated by Thames Travel and are summarised in [Table 2.1](#).

Table 2.1 Summary of Bus Services

No.	Route	Monday to Friday		Saturday		Sunday	
		Avg. Frequency	Operating Times	Avg. Frequency	Operating Times	Avg. Frequency	Operating Times
98/98A	Didcot Parkway – Great Western Park – Harwell Campus	30 mins (up to 15 mins during peak hours)	06:40 – 19:02	N/A	N/A	N/A	N/A
X32/X33/33	Oxford – Abingdon – Milton Park – Didcot – Harwell – Wantage	30 mins	05:39 – 21:13	30 mins (up to 1hr to Oxford)	07:07 – 21:13	Hourly (local stops only)	09:38 – 18:37

2.5.3 **Table 2.1** demonstrates Harwell is well served by bus routes which offer connections to the local area and major employment opportunities.

2.5.4 Both routes detailed in **Table 2.1** also serve Didcot and Didcot Parkway railway station, with the benefits of this detailed in subsequent paragraphs. Service X32 runs to Oxford, providing an hourly service Monday to Saturday.

2.6 Accessibility by Rail

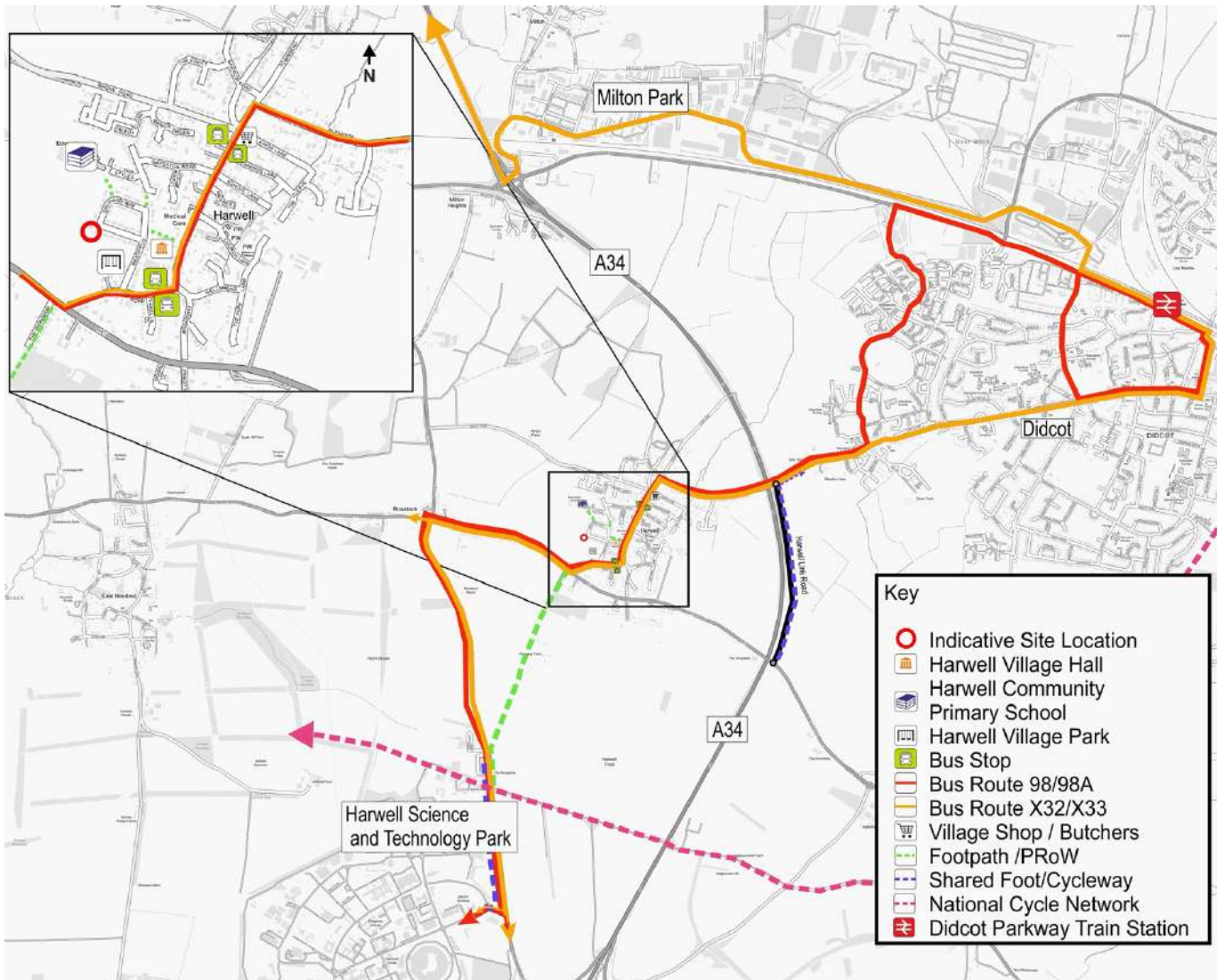
2.6.1 Didcot Parkway station is a 20-minute bus journey or 17-minute cycle from the application site. The station is on the Great Western Mainline and offers frequent direct services east to Reading, London Paddington and west to Bristol and Cardiff. Direct services are also available to Oxford and further north toward Birmingham.

2.6.2 Didcot Parkway station has parking spaces for up to 226 bicycles and car parking for up to 1,127 vehicles. Whilst the potential is clear for access to Didcot Parkway station by bicycle or bus, it is recognised that a shorter distance car trip to the station to complete a longer distance journey by train may represent a positive trade-off with longer distance car travel.

2.7 Local Facilities and Amenities

2.7.1 The application site is located in close proximity to a number of local facilities and amenities within the village of Harwell and the surrounding areas. A number of key facilities in the locality are illustrated on **Figure 2.2**.

Figure 2.2 Local Facilities and Amenities



2.7.2 Manual for Streets (MfS) details a ‘walkable neighbourhood’ as one in which local facilities are within an 800m (or 10 minute) walk of the site. As shown in **Figure 2.2**, a number of facilities are within 800m of the site including Harwell Community Primary School (approx. 180m), Harwell Village Hall (approx. 250m), Harwell Village Park (approx. 250m), Wantage Road bus stops (approx. 370m) and local shops on High Street (approx. 630m).

2.7.3 It is widely considered that cycling has the potential to substitute short car trips, particularly those under 5km, and form part of a longer journey by public transport. This includes destinations such as Milton Park, approximately 4.3km away via Cow Lane and the A4130, and Didcot Railway Station, approximately 4.5km away via the B4493. The B4493 also provides a suitable route to the centre of Didcot, within a cycling distance of approximately 5km.

2.7.4 The application site is considered very accessible and the walkable nature of the village may encourage future residents to travel by sustainable means for journey purposes satisfied by these local facilities and amenities.

2.8 Vehicle Access

2.8.1 The application site fronts onto Orchard Way from which the existing access is taken. In the vicinity of the application site, Orchard Way is approximately 5.5 metres wide (widening up to 6.4m on the bend) with footway and grass verge on either side of the carriageway.

2.8.2 Orchard Way leads from the street named Westfield looping back around on itself to link with Westfield again. Westfield is stopped-up just beyond its junction with Orchard Way, effectively creating a cul-de-sac. Westfield links with Wantage Road to the south.

2.8.3 To the east is the B4493 High Street reachable from the site via Westfield and Wantage Road. The B4493 runs north to south through the village centre and east out of the village towards Didcot. A 30mph speed limit is in place on roads within the village including, but not limited to, Orchard Way, Westfield and Wantage Road.

2.9 Summary

2.9.1 A review of the existing conditions at the development site and the surrounding area has demonstrated that the development proposals can capitalise upon the existing sustainable infrastructure already in place to serve Harwell village.

2.9.2 The established sustainable travel infrastructure provides a range of access opportunities for pedestrians, cyclists and bus users, satisfying a variety of journey purposes, be that satisfied locally in the Village or access via bicycle, bus or train to major employment destinations. It is considered highly likely that future residents may choose to reside in the development on the basis of bus access to Harwell Science and Technology Park, in particular.

3. Development Proposals

3.1 Overview

- 3.1.1 The development proposals have been considered in terms of development schedule, car and cycle parking provision, access arrangements and refuse collection arrangements.
- 3.1.2 The planning application is at an Outline stage with all matters reserved except for the access. As such, the internal layout of the site is illustrative at this stage and subject to change during detail design. Nevertheless, the internal layout design will consider the movement of pedestrians and cyclists as well as various vehicle types.
- 3.1.3 An illustrative site layout plan of the proposed 5-unit scheme at 25 Orchard Way is provided in [Appendix A](#). Each of the 5 dwellings shown on the illustrative site layout contains four bedrooms.

3.2 Proposed Access Arrangements

- 3.2.1 Access to the proposed development is to be taken from Orchard Way, in a similar location to the existing driveway for number 25. The existing dwelling at 25 Orchard Way is to be demolished to allow for direct access on to Orchard Way. The proposed access is to be 4.8m wide with 4m to 6m radii. In keeping with the nature of existing accesses along Orchard Way, the proposed access is to take the form of a vehicle shared-surface crossover arrangement. This will accommodate all site users on the basis of very modest trip demand.
- 3.2.2 The posted speed limit of Orchard Way is 30mph. Based on this posted speed limit and MfS requirements visibility splays of 2.4m x 43m in both directions are proposed and achievable from the access. Orchard Way (and Westfield) are quiet residential streets which by their nature have low levels of vehicle movements. The proposed access design and visibility splays are considered suitable given the existing context and for the level of development proposed.
- 3.2.3 On-street parking along Orchard Way and Westfield is not controlled. The majority of properties in the vicinity of the site have existing off-street parking within their own curtilage. The proposed access will not result in the loss of any existing on-street parking as the location of the proposed access is on a bend and there is an existing access there already. In addition, and as noted in subsequent paragraphs, the development proposals will be expected to provide the required number of parking spaces per dwelling in line with Oxfordshire County Council residential parking standards.

3.3 Car and Cycle Parking Provision

3.3.1 Car parking provision for the proposed development is based on Oxfordshire County Council’s Transport for New Developments-Parking Standards for New Residential Developments. Appendix C of the document sets out the applicable maximum parking standards for the proposed development. **Table 3.1** details the car parking standards and the proposed provision for the development scheme.

Table 3.1 Parking Standards and Proposed Provision

No. Bedrooms	No. Dwellings	Allocated Spaces	Number of additional unallocated spaces when two allocated spaces per dwelling is provided	Standard Unallocated Requirement	Total Provision
4	5	10	0.3	1.5 (2)	12

3.3.2 The proposed development of 5 units includes provision of 10 allocated parking spaces. As detailed in **Table 3.1**, the requirement for unallocated parking within new developments is 0.3 spaces per 4-bedroom dwelling, when 2 allocated spaces are provided to each property. The illustrative layout shows 12 parking spaces, 2 per unit and an additional 2 unallocated spaces, thereby meeting the parking provision required by the standards.

3.3.3 Oxfordshire County Council also provide minimum standards for cycle parking for new residential developments. For a dwelling of 2 bedrooms or more a minimum of 2 spaces per unit should be provided. The proposed development will provide the required number of cycle parking space as per Oxfordshire County Council’s minimum standard. Cycle parking is to be provided for within the curtilage of each individual dwelling.

3.4 Servicing, Refuse Collection and Emergency Access

3.4.1 Swept path analysis of the proposed access and illustrative layout has been undertaken to inform the proposed refuse collection arrangements. The refuse vehicle will access the development site from Orchard Way in a forward gear, turning within the site and exiting the development site in a forward gear. Operatives from the refuse vehicle will be able to access each individual residents’ bins from the kerbside within 25m walking distance in accordance with MfS guidance.

3.4.2 A swept path analysis drawing, demonstrating access for an 11.6m refuse vehicle on the above basis, is provided as drawing 325533 001 in **Appendix B**. The turning area between units 2 and 3 will also allow for a fire tender and / or delivery van to turn within the development site.

4. Trip Generation

4.1 Overview

4.1.1 An estimation of trip generation the proposed development is expected to generate, in terms of AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour period vehicular movements, has been undertaken. The estimation of development traffic has informed the likely impact of the development on the local highway network.

4.2 Vehicular Trip Generation

4.2.1 Trip rates for the proposed 5-unit scheme have been derived from the TRICS database (ver. 7.7.4), utilising the land category '03 – A – Houses Privately Owned'.

4.2.2 The following site survey filtering criteria have been applied when interrogating the TRICS database:

- All regions within England, excluding Greater London;
- Number of dwellings ranges from 1 – 50 units;
- Date Range – 01/01/12 to 27/09/19;
- Location – Edge of Town, Neighbourhood Centre.

4.2.3 The criteria detailed above has been informed by the trip rates presented (and agreed by Oxfordshire County Council) in the TS for the 15-unit scheme (although planning consent was for 9 units) at Land West of Orchard Way, Harwell.

4.2.4 The AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour Total Person trip rates, along with the expected number of trips generated by the proposed 5-unit scheme are summarised in **Table 4.1**. The full TRICS output is provided in **Appendix C**.

Table 4.1 Vehicular Trip Rates and Potential Trip Generation

Trip Rates / Trips	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)		
	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
Total Person Trip Rates (per unit)	0.281	0.787	1.068	0.569	0.312	0.881
Trip Generation (5 units)	1	4	5	3	2	4

4.2.5 **Table 4.1** demonstrates that during the AM highway network peak, the 5 proposed residential units are estimated to generate 5 two-way, total person movements. In the PM peak, the 5 proposed residential units are estimated to generate 4 two-way, total person movements.

4.2.6 In order to determine the mode share for travelling to work of the future occupants of the application site, data has been obtained from the Office for National Statistics (ONS).

4.2.7 The application site is located within the 2011 Lower Super Output Area 'Vale of White Horse 015B (E01028727). The method of travel to work for residents within that area, specified with the 2011 Census has been examined to determine the percentage mode share. **Table 4.2** specifies the percentage of people within the area by mode of travel to work.

Table 4.2 – Travel to Work - Percentage Mode Share

Mode of Transport	Percentage Split
Car or Van	74%
Passenger in Car	4%
Bicycle	4%
On Foot	5%
Public Transport	10%
Other	2%
Total	99%

4.2.8 The percentages specified in **Table 4.2** have been applied to the trip rates determined via TRICS and displayed in **Table 4.1**, in order to calculate the total number of trips made by each mode, within the selected area. The results of these calculations are shown in **Table 4.3**.

Table 4.3 – Multi-Modal Trip Generation (AM & PM Peak)

Mode	AM Peak (08:00 – 09:00)		PM Peak (17:00 – 18:00)	
	Two-Way Trip Rate	No. Trips	Two-Way Trip Rate	No. Trips
Car or Van	0.792	4	0.654	3
Passenger in Car	0.047	0	0.039	0
Bicycle	0.047	0	0.039	0
On Foot	0.055	0	0.045	0
Public Transport	0.102	1	0.084	1
Other	0.024	0	0.020	0
Total	1.068	5	0.881	4

4.2.9 **Table 4.3** demonstrates that during the AM highway network peak, the 5 proposed residential units are estimated to generate 4 two-way, vehicle movements. In the PM peak, the 5 proposed residential units are estimated to generate 3 two-way, vehicle person movements. **Table 4.3** demonstrates that the remaining total person trip, identified in **Table 4.1** is expected to be undertaken via sustainable means, most likely via public transport.

4.3 Summary

- 4.3.1 Overall, an uplift of 4 two-way vehicular movements is expected during the AM peak hour, whilst an uplift of 3 two-way vehicular movements is expected during the PM peak hour, as a result of the proposed development. The impact of this low level of additional vehicle trips is considered to be negligible. This represents an increase of vehicles on the local highway network of approximately 1 vehicular trip every 15 minutes during the AM peak and approximately 1 vehicular trip every 20 minutes in the PM peak.

5. Conclusions and Recommendation

5.1 Conclusions

5.1.1 This TS has confirmed the transport matters necessary for consideration at an Outline planning application stage (with all matters reserve except access). It has confirmed the following in support of the document objectives set out in **Section 1**:

- Detailed the good level of accessibility, especially by sustainable means, to and from the site from the surrounding area. Footways are in place on surrounding streets, providing accessible links to a number of local amenities and facilities within a reasonable walking distance of the site. Harwell is served by a frequent bus service providing links to the Didcot, Oxford and major employment sites such Harwell Science and Technology Park and Milton Park;
- Detailed the proposed development, its means of access from Orchard Way, provision for pedestrians and the proposed parking provision. Swept path analysis of the illustrative layout has also shown a large refuse vehicle can access and serve each proposed unit within a 25m bin collection distance; and
- Provided an estimation of development trips, during the AM (08:00-09:00) and PM (17:00-18:00) highway network peaks based on TRICS data. The trip generation assessment has shown that the development traffic is expected to be very modest, with one vehicular movement (in either direction) expected every 15 minutes during the AM peak hour and approximately every 20 minutes during the PM peak hour. This is expected to have a negligible impact on the local highway network.

5.2 Recommendation

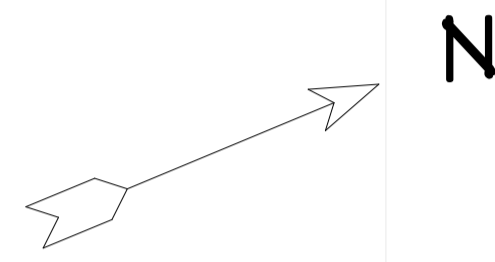
5.2.1 Given all of the above findings of this TS, the development proposals are considered sound in transport terms. It is recommended that the planning application be viewed positively from a transport perspective on this basis.

APPENDICES

APPENDIX A

Illustrative Site Layout

RECREATION GROUND



TREE (ROOT and SHADOW)



Site Area
2364m²
21.1DPH

Neighbouring site for 9 homes
approved under P20/V2219/FUL and
under construction

ORCHARD WAY

El Sub Sta

43

27

31

33

21

24a

24

SHEET:	SCALE:	DATE:
One	1:250	15/02/2021

DRAWINGS PROVIDED BY:
Feltham Properties Ltd

PROJECT DESCRIPTION:
25 Orchard Way, Harwell

SHEET TITLE:
5 Dwellings @ 25 Orchard Way

REVISION TABLE		
NUMBER	DATE	REVISION DESCRIPTION



APPENDIX B

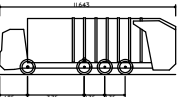
Swept Path Analysis



ACCESS

drawing title

SWEEP PATH ANALYSIS 11.6m LARGE REFUSE VEHICLE



ref 11643	11.643m
Overall Length	2.500m
Overall Width	3.75m
Overall Body Height	0.304m
Min Body Ground Clearance	2.500m
Track Width	4.00m
Lock to Lock time	4.00s
Wall to Wall Turning Radius	11.250m

client

FELTHAM PROPERTIES LTD

job title

LAND AT 25 ORCHARD WAY, HARWELL

EGRESS

mode transport planning
9 Greyfriars Road
Reading
RG1 1NU

t 0118 206 2945
e info@modetransport.co.uk
w www.modetransport.co.uk



scale
1:500 @ A3

drawn **RJM**

checked **LF**

created **Feb 21**

rev	by	chk	date	remarks
A	RJM	LF	16/02/21	MASTERPLAN UPDATED
-	RJM	LF	02/02/21	FIRST ISSUE

drawing no. **J32-5533-001**

This drawing has been produced by mode transport planning. No responsibility will be accepted for the use of this drawing in any other project.

APPENDIX C

TRICS Output

Calculation Reference: AUDIT-754101-210205-0221

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	2 days
	KC KENT	1 days
03	SOUTH WEST	
	DC DORSET	1 days
	SM SOMERSET	3 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
	SF SUFFOLK	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 8 to 49 (units:)
 Range Selected by User: 1 to 50 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 27/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	4 days
Wednesday	4 days
Thursday	4 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	18 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	13
Neighbourhood Centre (PPS6 Local Centre)	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	14
Village	4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 18 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	5 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	2 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	4 days
125,001 to 250,000	3 days
250,001 to 500,000	4 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	13 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	4 days
No	14 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	18 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD Edge of Town Residential Zone Total No of Dwellings: 24 <i>Survey date: MONDAY 24/11/14</i>	TERRACED HOUSES	CHESHIRE	<i>Survey Type: MANUAL</i>
2	CH-03-A-10 MEADOW DRIVE NORTHWICH BARNTON Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: TUESDAY 04/06/19</i>	SEMI-DETACHED & TERRACED	CHESHIRE	<i>Survey Type: MANUAL</i>
3	DC-03-A-08 HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST Edge of Town Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 24/03/14</i>	BUNGALOWS	DORSET	<i>Survey Type: MANUAL</i>
4	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone Total No of Dwellings: 39 <i>Survey date: TUESDAY 13/11/18</i>	TERRACED & SEMI-DETACHED	HAMPSHIRE	<i>Survey Type: MANUAL</i>
5	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: WEDNESDAY 31/10/18</i>	MIXED HOUSES	HAMPSHIRE	<i>Survey Type: MANUAL</i>
6	KC-03-A-05 ROCHESTER ROAD NEAR CHATHAM BURHAM Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 8 <i>Survey date: FRIDAY 22/09/17</i>	DETACHED & SEMI-DETACHED	KENT	<i>Survey Type: MANUAL</i>
7	NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i>	DETACHED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
8	NF-03-A-05 HEATH DRIVE HOLT Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: THURSDAY 19/09/19</i>	MIXED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
9	NY-03-A-11 HORSEFAIR BOROUGHBRIDGE Edge of Town Residential Zone Total No of Dwellings: 23 <i>Survey date: WEDNESDAY 18/09/13</i>	PRIVATE HOUSING	NORTH YORKSHIRE	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

10	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:	18	
	<i>Survey date: WEDNESDAY</i>	<i>09/09/15</i>	<i>Survey Type: MANUAL</i>
11	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	38	
	<i>Survey date: FRIDAY</i>	<i>22/09/17</i>	<i>Survey Type: MANUAL</i>
12	SH-03-A-06 ELLESMERE ROAD SHREWSBURY	BUNGALOWS	SHROPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	16	
	<i>Survey date: THURSDAY</i>	<i>22/05/14</i>	<i>Survey Type: MANUAL</i>
13	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone Total No of Dwellings:	33	
	<i>Survey date: THURSDAY</i>	<i>24/09/15</i>	<i>Survey Type: MANUAL</i>
14	SM-03-A-02 HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL	MIXED HOUSES	SOMERSET
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	42	
	<i>Survey date: TUESDAY</i>	<i>25/09/18</i>	<i>Survey Type: MANUAL</i>
15	SM-03-A-03 HYDE LANE NEAR TAUNTON CREECH ST MICHAEL	MIXED HOUSES	SOMERSET
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	41	
	<i>Survey date: TUESDAY</i>	<i>25/09/18</i>	<i>Survey Type: MANUAL</i>
16	WK-03-A-02 NARBERTH WAY COVENTRY POTTERS GREEN	BUNGALOWS	WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	17	
	<i>Survey date: THURSDAY</i>	<i>17/10/13</i>	<i>Survey Type: MANUAL</i>
17	WK-03-A-04 DALEHOUSE LANE KENILWORTH	DETACHED HOUSES	WARWICKSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	49	
	<i>Survey date: FRIDAY</i>	<i>27/09/19</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

18	WM-03-A-04	TERRACED HOUSES	WEST MIDLANDS
	OSBORNE ROAD		
	COVENTRY		
	EARLSDON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	39	
	Survey date: MONDAY	21/11/16	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	18	30	0.088	18	30	0.306	18	30	0.394
08:00 - 09:00	18	30	0.161	18	30	0.338	18	30	0.499
09:00 - 10:00	18	30	0.149	18	30	0.206	18	30	0.355
10:00 - 11:00	18	30	0.154	18	30	0.158	18	30	0.312
11:00 - 12:00	18	30	0.138	18	30	0.180	18	30	0.318
12:00 - 13:00	18	30	0.141	18	30	0.167	18	30	0.308
13:00 - 14:00	18	30	0.171	18	30	0.141	18	30	0.312
14:00 - 15:00	18	30	0.167	18	30	0.178	18	30	0.345
15:00 - 16:00	18	30	0.255	18	30	0.206	18	30	0.461
16:00 - 17:00	18	30	0.240	18	30	0.160	18	30	0.400
17:00 - 18:00	18	30	0.328	18	30	0.160	18	30	0.488
18:00 - 19:00	18	30	0.228	18	30	0.123	18	30	0.351
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.220			2.323			4.543

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	8 - 49 (units:)
Survey date range:	01/01/12 - 27/09/19
Number of weekdays (Monday-Friday):	18
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	18	30	0.119	18	30	0.475	18	30	0.594
08:00 - 09:00	18	30	0.281	18	30	0.787	18	30	1.068
09:00 - 10:00	18	30	0.237	18	30	0.327	18	30	0.564
10:00 - 11:00	18	30	0.215	18	30	0.277	18	30	0.492
11:00 - 12:00	18	30	0.209	18	30	0.268	18	30	0.477
12:00 - 13:00	18	30	0.250	18	30	0.266	18	30	0.516
13:00 - 14:00	18	30	0.266	18	30	0.196	18	30	0.462
14:00 - 15:00	18	30	0.261	18	30	0.270	18	30	0.531
15:00 - 16:00	18	30	0.600	18	30	0.424	18	30	1.024
16:00 - 17:00	18	30	0.404	18	30	0.277	18	30	0.681
17:00 - 18:00	18	30	0.569	18	30	0.312	18	30	0.881
18:00 - 19:00	18	30	0.385	18	30	0.204	18	30	0.589
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.796			4.083			7.879

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.



keep up with mode:



Birmingham

☎ 0121 794 8390

London

☎ 020 7293 0217

Manchester

☎ 0161 464 9495

Reading

☎ 0118 206 2945

✉ info@modetransport.co.uk 📍 modetransport.co.uk 🐦 [@mode_transport](https://twitter.com/mode_transport)